



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Ulrike Reeh et al.                      Art Unit : 2815  
Serial No. : 09/221,789                              Examiner : Jerome Jackson, Jr.  
Filed : December 28, 1998  
Title : LIGHT-RADIATING SEMICONDUCTOR COMPONENT WITH A  
LUMINESCENCE CONVERSION ELEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Copies of references AA through CC listed on the attached form PTO-1449 are not enclosed pursuant to 37 C.F.R. § 1.98(a).

Under 35 USC §120, this application relies on related applications, application serial number 09/731,220, filed on December 6, 2000, now U.S. Patent No. 6,812,500 and application serial number 09/731,452, filed on December 7, 2000, now U.S. Patent No. 6,576,930. The following references were submitted to and/or cited by the Office in the prior applications and, therefore, are not provided in this application:

Desig. IDs:

CN, DP-DS, DU-EH, and EN-FK.

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CERTIFICATE OF MAILING BY FIRST CLASS MAIL

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CHERYL A. CARON

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Applicant : Ulrike Reeh et al.  
Serial No. : 09/221,789  
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Page : 2 of 2

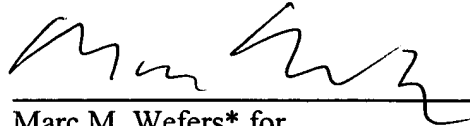
Attorney's Docket No.: 12406-003001 / 1996P1650 US  
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This statement is being filed after a first Office action on the merits, but before receipt of a final Office action or a Notice of Allowance. A check for \$180 in payment of the late submission fee of C.F.R. § 1.17(p) is enclosed. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 12406-003001.

Respectfully submitted,

Date: \_\_\_\_\_

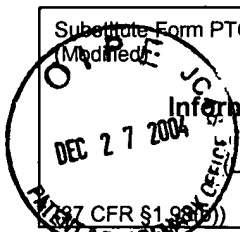
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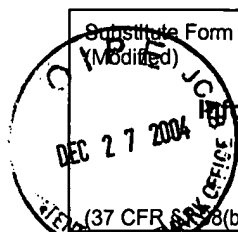
**\*See attached document certifying that Marc M. Wefers has limited recognition to practice before the U.S. Patent and Trademark Office under 37 C.F.R. § 11.9(b).**

|   |  |  |  |                                      |
|---|--|--|--|--------------------------------------|
| Substitute Form PTO-1449<br>(Modified)<br><br><b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary)<br>37 CFR § 1.905 | U.S. Department of Commerce<br>Patent and Trademark Office |  | Attorney's Docket No.<br><b>12406-003001</b> | Application No.<br><b>09/221,789</b> |
|   | Applicant<br><b>Ulrike Reeh et al.</b>                     |  |  |                                      |
|   | Filing Date<br><b>December 28, 1998</b>                    |  | Group Art Unit                               |                                      |

**U.S. Patent Documents**

| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee            | Class | Subclass | Filing Date If Appropriate |
|------------------|-----------|-----------------|------------------|---------------------|-------|----------|----------------------------|
|                  | AA        | 3,312,851       | 04/1967          | Flowers et al.      |       |          |                            |
|                  | AB        | 3,316,109       | 04/1967          | Rimbach             |       |          |                            |
|                  | AC        | 3,440,471       | 04/1969          | Baczewski et al.    |       |          |                            |
|                  | AD        | 3,483,416       | 12/1969          | G.A.W. Vermeulen    |       |          |                            |
|                  | AE        | 3,510,732       | 05/1970          | Amans               | 257   | 77       |                            |
|                  | AF        | 3,565,815       | 02/1971          | Christy             |       |          |                            |
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|                  | AY        | 4,780,752       | 10/25/1988       | Angerstein et al.   | 357   | 72       |                            |
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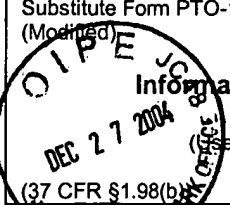
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| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |

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|--|--|---------------------------------------|-------------------------------|
| Substitute Form PTO-1449<br>(Modified)<br><br>Information Disclosure Statement<br>by Applicant<br>(Use several sheets if necessary)<br>(37 CFR 1.128(b)) | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>12406-003001 | Application No.<br>09/221,789 |
|  | Applicant<br>Ulrike Reeh et al.                            |                                       |                               |
|  | Filing Date<br>December 28, 1998                           | Group Art Unit                        |                               |

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|                  | BZ        | 5,994,722       | 11/1999          | Averback et al.     |       |          |                            |
|                  | BAA       | 6,245,259       | 06/12/2001       | Hohn et al.         | 252   | 301.36   |                            |

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|   | Applicant<br><b>Ulrike Reeh et al.</b>                     |  |                                      |
|   | Filing Date<br><b>December 28, 1998</b>                    | Group Art Unit                               |                                      |

**U.S. Patent Documents**

| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee      | Class | Subclass | Filing Date If Appropriate |
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|                  | CB        | 6,600,175       | 07/29/2003       | Baretz et al. | 257   | 100      |                            |
|                  | CC        | 2004/0016938    | 01/29/2004       | Baretz et al. | 257   | 100      |                            |
|                  | CD        |                 |                  |               |       |          |                            |
|                  | CE        |                 |                  |               |       |          |                            |

**Foreign Patent Documents or Published Foreign Patent Applications**

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation   |    |
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|                  |           |                 |                  |                          |       |          | Yes           | No |
|                  | CF        | 0333162         | 09/20/1989       | EPO                      |       |          |               |    |
|                  | CG        | 2004989         | 12/05/1969       | France                   |       |          | Abstract Only |    |
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|                  | CJ        | 2073134         | 09/24/1971       | France                   |       |          | Abstract Only |    |
|                  | CK        | 2018353C        | 10/29/1970       | Germany                  |       |          | Abstract Only |    |
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|                  | CM        | 2059909         | 06/24/1971       | Germany                  |       |          | Abstract Only |    |
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|                  | CP        | 1317731         | 05/23/1973       | Great Britain            |       |          |               |    |
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|                  | CR        | 2000173         | 01/04/1979       | Great Britain            |       |          |               |    |
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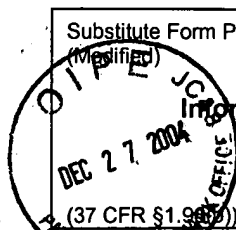
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| Substitute Form PTO-1449<br>(Modified)  | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>12406-003001 | Application No.<br>09/221,789 |
| <b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary) |  | Applicant<br>Ulrike Reeh et al.       |                               |
|   |  | Filing Date<br>December 28, 1998      | Group Art Unit                |

### Foreign Patent Documents or Published Foreign Patent Applications

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation   |    |
|------------------|-----------|-----------------|------------------|--------------------------|-------|----------|---------------|----|
|                  |           |                 |                  |                          |       |          | Yes           | No |
|                  | DA        | 03220286        | 09/27/1991       | Japan                    |       |          | Abstract Only |    |
|                  | DB        | 03287690        | 12/18/1991       | Japan                    |       |          | Abstract Only |    |
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|                  | DD        | 05315653        | 11/26/1993       | Japan                    |       |          | Abstract Only |    |
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|                  | DF        | 05347432        | 12/27/1993       | Japan                    |       |          | Abstract Only |    |
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|                  | DM        | 06306356        | 11/01/1994       | Japan                    |       |          | Abstract Only |    |
|                  | DN        | 60090680        | 11/06/1986       | Japan                    |       |          |               |    |
|                  | DO        | 04137570        | 05/12/1992       | Japan                    |       |          | Abstract Only |    |
|                  | DP        | 081010/1997     | 3/97             | Japan                    |       |          | X             |    |
|                  | DQ        | JP 01-179471    | 07/17/1989       | Japan                    |       |          |               |    |
|                  | DR        | JP 02-927279    | 07/28/1999       | Japan                    |       |          |               |    |
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|                  | DT        | 6-208845        | 07/26/1994       | Japan                    |       |          | Abstract Only |    |
|                  | DU        | JP 07-292354    | 07/11/1995       | Japan                    |       |          |               |    |
|                  | DV        | JP 08-007614    | 01/12/1996       | Japan                    |       |          | X             |    |
|                  | DW        | JP 08-096958    | 04/12/1996       | Japan                    |       |          |               |    |

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| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |                 |

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|--|--|--|---------------------------------------|-------------------------------|
| Substitute Form PTO-1449<br>(Modified)<br><br><b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary)<br>(37 CFR §1.98(b)) | U.S. Department of Commerce<br>Patent and Trademark Office |  | Attorney's Docket No.<br>12406-003001 | Application No.<br>09/221,789 |
|  | Applicant<br>Ulrike Reeh et al.                            |  |                                       |                               |
|  | Filing Date<br>December 28, 1998                           |  | Group Art Unit                        |                               |

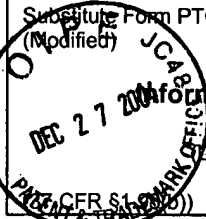
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| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation   |    |
|------------------|-----------|-----------------|------------------|--------------------------|-------|----------|---------------|----|
|                  |           |                 |                  |                          |       |          | Yes           | No |
|                  | EA        | JP 09-028642    | 02/04/1997       | Japan                    |       |          |               |    |
|                  | EB        | JP 46-39866     | 06/12/1973       | Japan                    |       |          |               |    |
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|                  | EJ        |                 |                  |                          |       |          |               |    |
|                  | EK        |                 |                  |                          |       |          |               |    |

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|------------------|-----------|---|
|                  | EL        | Robbins et al., "Single Crystal Y3Al5O12: Tb Phosphor Produced by Ion Implantation;," <u>Journal of the Electrochemical Society</u> , Vol. 129, No. 4, pp. 816-820                                  |
|                  | EM        | Poort et al., "Optical properties of Eu2+-activated orthosilicates and orthophosphates" <u>Journal of Alloys and Compounds</u> , Vol. 260, No. 1-2, pp. 93-97 (September 12, 1997)                  |
|                  | EN        | Japanese Patent Abstract 08007614 (Yoshinori), dated January 12, 1996   |
|                  | EO        | English Translation of Proceedings of 264 <sup>th</sup> Institute of Phosphor Society, "Development and Application of high bright white LED Lamps", November 29, 1996, pp. 5-14.                   |
|                  | EP        | Journal of the Electrochemical Society, Solid-State Science and Technology, "Preparation of Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> Based Phosphor Powders", February 1987, pp. 493-498.     |
|                  | EQ        | Chao et al., "White Light Emitting Glass", Jour. Solid State Chemistry, p. 17-29.   |
|                  | ER        | Nakamura, SPIE, "Present performance of InGaN based blue/green/yellow LEDS", vol. 3002, 1997, pp. 26-35.  |
|                  | ES        | A Dictionary of Metallurgy, page 9, 1958  |
|                  | ET        | Japanese Internet Literature, "Preparing Nearly-Spherical Aluminate Phosphors of Uniform Size".   |
|                  | EU        | Course of Lectures: Fundamental and Application of Color Image Engineering, No. 5, Television Gakkaishi (The Journal of the Institute of Television Engineers of Japan), Vol. 47, 1993, p. 753-764. |
|                  | EV        | R.W.G. Hunt, "Revised Colour-Appearance Model for Related and Unrelated Colours", Color Research and Application, Vol. 14, 1991 p. 146-165.   |

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| Substitute Form PTO-1449<br>(Modified)<br><br>Information Disclosure Statement<br>by Applicant<br>(Use several sheets if necessary)<br>35 CFR § 1.98(a)(2) | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>12406-003001<br>Applicant<br>Ulrike Reeh et al.<br>Filing Date<br>December 28, 1998 | Application No.<br>09/221,789<br>Group Art Unit |
|--|--|--|---|

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|                  | FB        | Mitsuo Ikeda et al. "Equivalent Lightness of Colored Objects at Illuminances from the Scotopic to the Photopic Level", Color Research and Application, Vol. 14, 1989, p. 198-206.                   |
|                  | FC        | Mitsuo Ikeda et al., "Equivalent Lightness of Colored Objects of Equal Munsell Chroma and of Equal Munsell Value at Various Illuminances", Color Research and Application, Vol. 16, 1991, p. 72-80. |
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|                  | FE        | Change of Color Conspicuity for Various Illuminance Levels Effects of the Purkinje shift, Shomei Gakkaishi (Journal of the Illuminating Engineering Institute of Japan, Vol. 17, 1987, p. 612-617.  |
|                  | FF        | Japanese Journal of Applied Physics, Part 2, Vol. 31, No. 10B, 1992, p. L1457-L1459.  |
|                  | FG        | Philips Journal of Research, Vol. 36, No. 1, 1981, p. 15-30.  |
|                  | FH        | Translation of JP 48-39866, 05/18/1973, Japan   |
|                  | FI        | Translation of JP 6-0009, 08/19/1994, Japan   |
|                  | FJ        | Translation of JP 5-50611, 07/02/1993, Japan  |
|                  | FK        | Translation of JP 5-72553, 10/05/1993, Japan  |
|                  | FL        |   |
|                  | FM        |   |

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